SARC Communicator

April 2013

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The Monthly Newsletter of the Surrey Amateur Radio Club

SURREY AMATEUR RADIO CLUB

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VIA THE WEB
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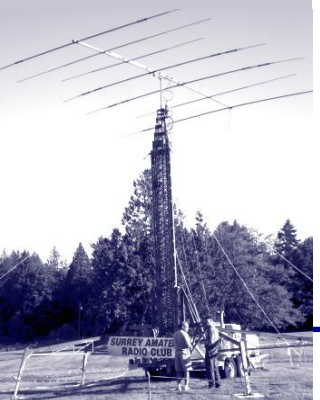
The **SARC Communicator** is published monthly for members of the Surrey Amateur Radio Club.

SARC maintains a website at **www.ve7sar.net** that includes club history, meetings, news and other information.



March Monthly Meeting Minutes

Introduction

The meeting was brought to order by President John Brodie VA7XB at 1900 hrs. After a welcome to guests and approval of the meeting agenda, John reviewed a proposal for SARC to have an informal social evening once a month, since many members are unable to attend the Friday morning breakfast on account of work commitments. The location would be the lounge at Scottsdale Bowling Lanes, on 84th Ave at Scott Rd., a venue offered by member Ken Clarke VE7BC, owner of the facility. This would take place on the last Wed evening of each month from 1930 to 2100 hr. A sufficient number of members showed interest to warrant this social get-together on a trial basis. An announcement will be forthcoming.

Financial Report

Treasurer Scott Hawrelak VE7HA reported a healthy bank balance in the chequing and savings accounts.

Fund Raising

John VA7XB advised that after various ideas had been considered for fundraising, the decision had been made by the Executive to proceed with a raffle to be held jointly with Langley ARA and SEPAR. Raffle tickets will be available next meeting for sale by members. Each book will contain 10 tickets at $2 each, or $20 for a book. 1st prize will be a $500 weekend at Harrison Hot Springs and other prizes are being finalized now. The draw will be held on Saturday, Sept. 7th at the Langley Good Times Cruise-in, where the participants will share tables to sell tickets and provide information about the role of their respective organizations. This year, we will also provide emergency communications for the event, similar to what is done at the Hyack parades, the Sun Run and Bikathon etc. This event will provide a good opportunity to promote public awareness of the contribution made by amateur radio. If all 2500 tickets are sold, the profit to each participating group should be significant. The need for strong support from the participating organizations was emphasized in order for this fund-raiser to be successful.

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President's Report

	SEPARS Net	SARC Net
1st Tuesday	Drew VA7DRW Jay VE7OFH Standby	Drew VA7DRW
2nd Tuesday	Dixie VA7DIX Alan VA7BIT Standby	Jinty VA7JMR
3rd Tuesday	Rob VE7CZV	Anton VE7SSD
4th Tuesday	Peter VE7PGX Dixie VA7DIX Standby	John VA7XB
5th Tuesday	Jinty VA7JMR	Bill VE7XS
Want a turn at Net Control? Contact the SARC Net Manager ve7ti @ separs.net		

SARC hosts an Amateur Radio net each Tuesday evening at 8 PM. Please tune in to the VE7RSC repeater at 147.360 MHz (+600 KHz) Tone=110.9, also accessible on IRLP node 1980 and Echolink node 496228. On UHF we operate a repeater on 443.775MHz (+5Mhz) Tone=110.9

CLUB EXECUTIVE 2013-2013

PRESIDENT
John Brodie VA7XB

VICE PRESIDENT
Brett Garrett VE7GM

SECRETARY
Vacant

TREASURER
Scott Hawrelak VE7HA

DIRECTORS
Kelvin Hall VA7KPH (SEPARS)

John Schouten VE7TI (Communicator Editor & Net Manager)

George Merchant VE7QH (Repeaters)

Bill Little VA7ZBL (Membership)

Bill Gipps VE7XS

Rob Gilchrist VE7CZV

Proposed Expenditures

Member approval for purchase of a sleeve and ball for each of the 2 club trailers was requested. Al Neufeld VE7CDC and Rick Law VE7GMO offered to donate these items. Rick and Kelvin VA7KPH will follow up and ensure that the items are acquired and securely stored at the lockup. Purchase of two AC line filters for the generators was also proposed – filters are needed to reduce RF noise which degrades operation on 80m. A vote was taken on a motion to authorize the expenditure of up to $350, which was approved. The Field Day planning group is also considering the need for roofing filters for the TS480 radios and will come back with a recommendation next meeting.

SEPARS

Kelvin Hall VA7KPH reported that SEPARS will be holding further training sessions on the TS480 and IC-2820 radios over the next few weeks.

Membership

Bill Little VA7ZBL reported that the current membership stands at 74.

Website

Hiu Yee VE7YXG had nothing to report concerning the website.

Communicator

Al Neufeld VE7CDC commented on the high quality of the Communicator produced by editor John Schouten VE7TI and the significant value it brings to the club.

Weekly Net

With Anton James VE7SSD being unavailable for net control duties during the next two months, a request was made for a replacement. Nelson Eisel VE7NAE offered to take the net the 3rd Tuesday of March, and John VE7TI will be asked to take it in April.

Foxhunt

Anton James VE7SSD reported that the annual foxhunt and barbeque are confirmed for Saturday, May 18th at Crescent Park in South Surrey. More information will be provided in April. John VA7XB advised that 5 members have signed up to build a loop antenna, as described in the January 2013 edition of QST.

Repeater

George Merchant VE7QH reported that the repeaters are working well and that the corrosion problem appears to have been arrested. Surrey Fire Services advises they are OK with SARC maintaining the old repeater site as backup to Concord. This repeater which also operates at 147.360 but on a different tone is currently non-functioning and the cause will be investigated shortly by George Merchant VE7QH and Steve Coleman VE7MAN.

Operator Training

Brett Garrett VE7GM reported that the operator training group will be participating in the BARTG RTTY contest the weekend of March 16/17. Anyone who is interested but has not yet signed up should do so immediately, by advising Brett or John. The next contest will be the CQ WPX SSB contest March 30/31.

Field Day

Brett Garrett VE7GM advised that the FD committee has been meeting every 2 weeks in preparation for FD. A conflict has arisen for the planned dry run on May 4th and alternatives are being considered. A show of hands was called for members present who expected to attend field Day; the count was 16.

April Meeting

Bill Gipps VE7XS will make a presentation on his Africa DXpedition.

March Presentation

There being no new business and after a short coffee break, John White VA7JW, the meeting's featured presenter was introduced. Specially noted was that John was co-author with Ken Tapping of the Feb 2013 QST article on the Penticton Solar Flux Receiver, which was awarded the coveted QST Cover Plaque Award for the best article of February. John gave an informative talk on basics of antenna theory, resonance, impedance, inductive and capacitive reactance and radiation resistance as background to some practical examples of short antennas which may work for members with limited space and other restrictions. He also provided some warnings about RF energy vis-à-vis proximity to antennas. A link will be put on the SARC website to direct those interested to the North Shore ARC site for a copy of John's presentation. SARC is grateful to John for his on-going contributions to SARC by way of his frequent and informative presentations. John promised to come back soon and repeat his talk on lightning protection recently given to the North Shore Club.

The meeting was adjourned at 2110.

DOWN THE LOG...

SARC Monthly Meetings

2nd Wednesday (Sept-Jun)
1900 hrs local at the Emergency Management BC PREOC,
14275 96th Avenue, Surrey, BC

Weekly Club Breakfast

Friday at 0800 local
ABC Country Restaurant at
600 - 7380 King George Blvd.
Surrey

SARC Net

Tuesday at 2000 hrs local
on 147.360 MHz (+) Tone=110.9

SEPARS Net

Tuesday at 19:30 hrs local
on 147.360 MHz (+) Tone=110.9

Announcements & News

SEPARS Monthly Workshop
Third Thursday, 1900-2130 local
Rm. 214, 13569 - 76th Avenue,
Surrey.

SEPARS Training
Fourth Saturday, 0830 local,
Firehall #1, 88 & 132nd Street,
Surrey

On the Web

ve7sar.net

Between newsletters, watch your e-mail for announcements of events, monthly meetings and training opportunities. These announcements can also be found on our web page, or via:

Twitter

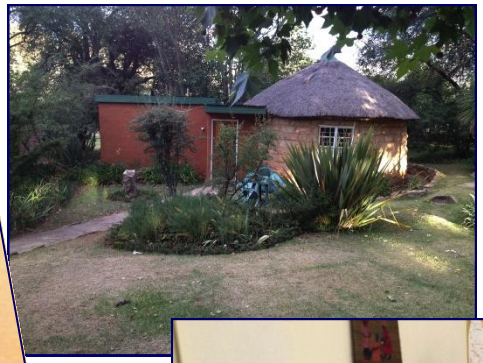
@ve7sar

Photos

Web Albums

FEATURE

Next Meeting: DXpedition to Africa



At the next SARC meeting on April 10th, Bill Gipps VE7XS will describe his exciting adventures on his DXpedition to the Kingdom of Lesotho in Africa. Bill is a long-time member and Director of both SARC and SEPAR, an active and enthusiastic promoter of ham radio, and well-known across Canada as our RAC Director for Yukon and the Pacific Region. In the last two years he has been developing his contest station at the "project" site in rural Langley. Bill and his colleagues can often be heard working the contests from Langley, using an ever-growing array of big antennas.

Bill's blog describes the event and may be read at http://www.ve7isv.com/lesotho.htm

We hope you will join us at the April meeting when Bill will describe the journey and his experiences.

Radio-Active Jinty Reid VA7JMR

Garvin Yee VA7YEE

Born and raised in East Vancouver, Garvin Yee was the eldest of 3 children, the others being girls. Both his parents are Chinese. His two sisters now live in North Vancouver and Maple Ridge. He has been married and has a son and daughter who live in Langley and South Surrey and is grandfather to 2 grandchildren.

Garvin attended Gladstone High School and then went on to study general science at Langara College for a year. He spent 2 years at BCIT, graduating in Instrumentation and Control Systems. After graduation he worked at various jobs until obtaining work in the construction industry doing the finishing work in houses, later moving into the sales area. He also sold insurance and did some telemarketing. From 1986 -87 Garvin worked in security alarms. During his working life Garvin worked part-time for the Langley Fire Department as a dispatcher. He was also in the army reserves working in the communications section.

Throughout most of his life Garvin has been an outdoors person and participated in hiking, skiing, golf, snorkeling, cycling and camping. He loves sports and has participated in rugby and track and field, as well as volleyball. He has always been very interested in astronomy with a special interest in science fiction and space. His travels have led him to Scotland, England and the USA and he has a great love for the Canadian and American west coastal areas. Garvin has also been to Japan, Hong Kong, Taiwan, Hawaii and the Cook Islands. Garvin liked reading science fiction, techno thriller and was an avid war gamer. He maintains his love of books now through talking books from the library. Garvin moved from Vancouver to Newton and then purchased a condo where he now lives in the Guildford area.

Sadly, in 2001 Garvin was diagnosed with type 2 diabetes and started losing some of his vision in 2003 with total blindness in 2008. In addition he was diagnosed with Leukemia and was not expected to live but received a bone marrow transplant which was successful. He was forced to give up working and has had to find other ways to fill his days. He has an adapted computer which provides a link to the world outside his home and allows him to communicate with others. In 2011 he became interested in ham radio and obtained his ham radio license in August 2012 .

Having a desire to give back to the community Garvin searched the internet for volunteer opportunities and came across SEPAR and states that at the time he told himself "I can do this." He joined in September 2012 and is now training with SEPAR and regularly attends the training sessions. He listens to sports on the radio and enjoys politics and history.

It has been a huge adjustment to being blind but Garvin has learned to accept the inevitable and sees it as the card he has been dealt in life. He has learned how fragile life can be and has a desire to be as independent as possible. His greatest challenge is transportation and his application to Handi dart, he hopes, will help with this.

Garvin's has a Kenwood TMV 7IA radio in his loft which he uses as his radio shack. His challenge in being a radio operator is in learning his boundaries in regards to using a radio, what he can do and what he needs help with. Garvin has recently joined SARC and is interested in finding out more about contesting and whether or not that would be a feasible activity given his visual impairment. Be sure and introduce yourself to Garvin when you see him.

The Contest Contender

Jim Smith VE7FO

It's been quite a while since I entered a contest from home and wrote a story about it. This story actually starts with last weekend's CQ WPX RTTY. I've had a number of challenges recently which have made it difficult to get on the air but I vowed I'd get on for the WPX RTTY contest.

Challenges?

Six weeks or so ago we had a very uncharacteristic ice storm which resulted in ½" of radial ice on my 80 and 40 dipoles. Now you folks who don't have the privilege of living here in Lotus Land (Vancouver and environs) aren't likely to be sympathetic, but my dipoles broke. Any self-respecting ham would have fixed them by the next day at the latest. However, my wife has just had knee replacement surgery so a lot of my time is taken up looking after her needs. (She's doing fine - walked around the block today using Nordic Poles). The rest of the time has been taken up trying to get an old amp working - first one I've ever had so I don't know much about them.

Some time before that the element to boom clamp on the driven element on my old TH3 tribander got a little loose and the wind would rotate the driven element in and out of the plane of the other elements. Recently I noticed a strange clicking in the receiver whenever I turned the antenna as if something was interrupting the signals. Some time later, the clicking disappeared, as did the signals. I did get a really good signal back from the transmitter though. Binoculars revealed that wires connecting the balun to the element and the Beta match were broken. Well, I don't climb and the weather was such that I didn't want to ask any of my buddies.

In desperation I could use my R5 Vertical for 20-10m for WPX RTTY except for the fact that my FT-1000 MP MkV quit working. Tried my IC 706 MkII G along with the amp. Noticed that whenever I keyed it there was a giant spike on the leading edge of the output waveform. It was always there, regardless of the power output setting. Subsequent research on the net told me that this spike could be as high as 160W. Strikes me as being a pretty nasty thing to do to an amp so won't ever hook it up to an amp again.

Also, my 706 has only stock filters - pretty wide for RTTY and wouldn't be a lot of fun. We've all been told by hockey and soccer announcers that how one meets challenges is a true test of character so, dammit, I'm going to be on for WPX RTTY. So, need a radio and would be great if the TH3 was fixed. Radio is no problem. I'm very involved in the VE7UF M/M station and I know that Duane has a TS-850 which has been retired from active service for some time. He agreed to loan it to me. Not wanting to bother him with packing and shipping hassles I went there to get it. This isn't trivial as he lives on an island. Total travel time there and back is about 10 hours and ferry plus gas comes to over $100.

Great - I've got a decent radio. Amp still isn't working properly. Never had one before so, while it would be nice, it isn't an issue. RW0CN, Mike, arrives on my doorstep a couple of days before WPX and says he has allocated one hour to fix the TH3. 41 minutes later he's been up the tower, replaced the broken wires and come down again. Travel time from RW0 makes the VE7UF ten hours appear inconsequential. Ditto the cost. Well, not an issue as Mike is living here now. He's also sporting the call VE7ACN. You may have worked him in WPX RTTY as that's the call the VE7UF M/M operation was using.

Getting fed up with fiddling with the amp but have got used to the idea that I absolutely have to have one so bought a used Alpha 9500 from a fellow club member. This thing is quite terrifying. When you've got it in Standby mode and send it some RF from the exciter it growls at you in a most alarming manner as all the stepper motors adjust everything. I guess one gets used to this. Hey, character overcomes all. I've got all the pieces. OK, station integration time.

Oh no - more character building. While the TS-850 I borrowed from 7UF has all the necessary cables and RS 232 converter for integration into his station, none of the DIN sockets match the connectors which plug into my MkV. Things like audio out from the receiver to the computer for decoding RTTY. So now I have to check out the TS-850 manual to see what I have to do. While I found it on the net, it isn't a model of clarity. Oh, and figure out how to include the amp. Trivial if you know what you're doing. Unnerving otherwise.

OK, here it is just before 0000 UTC, everything is working and I'm ready for WPX RTTY. Unfortunately it's Monday and the contest ended on Sunday. Mike let me know that he wasn't happy that I wasn't able to hold up my end and

make a lot of points for the Orca Club we belong to especially as, I'm sure, he probably had to reschedule some things to fit my antenna work in. I'm finding it easier nowadays to plead my advanced age when I screw up. I love the WPX RTTY contest and have been #1 VE in my category a couple of times. Character (well, at least the sporting kind) requires that grown men don't cry.

You might be wondering why I didn't just put all this into a WPX RTTY story. I thought about creating a 3830 entry with 0 Qs and 0 mults where I could put the story into the soapbox but worried that only a jerk would submit a 0 score entry to 3830. Besides, it's all about prep for ARRL DX CW. After all that, I wasn't able to spend more than about 10 hours in ARRL DX.

TH3 worked well

Dipoles have been pieced together again but SWR is way high. Didn't want to risk damage to amp so no 40 or 80m Qs.

TS 850 worked well

Alpha 9500 continued to intimidate me. I'm just not comfortable with something that thinks it's smarter than me making adjustments which will affect the life of a very expensive tube which it will deny any responsibility for paying for. It was nice, though, to get through under circumstances where I know I wouldn't have made it without the amp. Only got in about 10 BIC hours. Spent all my time in search an pounce mode as I was not really confident about the current setup. I wasn't able to get on until 2300Z. Lots of fiddling with gear as I get used to the TS 850 and Alpha amp. While I used the 850 many times at VE7UF M/M I never felt that I had mastered it. Gave up around 0600Z as 20 truly dead and low bands not available due to aforementioned antenna issues. Wasn't able to get back on until 1600Z. Hey, the morning opening to EU is happening, both on 20 and, to a much lesser extent, 15! Lots of fun "Hoovering up mults" on both bands. (I'm indebted to VR2BG for this phrase (seems sooo descriptive) Sure notice the difference an amp makes. Lots of responses on the first call. One could easily get addicted to this QRO stuff. Best 10 minute rate was 90 which I don't think is all that shabby for Search and Pounce. The amp helped a lot, of course.

Worked about 92 DX entities altogether. Nine-tenths of the way to DXCC in ten hours. This also is is not something I'm used to doing from my modest home station. Different from VE7UF, of course, where one routinely works DXCC and, less commonly, WAZ on several bands. I thought conditions were pretty decent on the high bands. Well, 10 wasn't that great. Caribbean, Central and South America, Oceana, but no Europe. Still, I can remember not that long ago making only 6 Qs on 10 from the big VE7UF M/M station. All in all, I was quite happy. Fun to get on from my own station again. 280 Qs in 10 hours, including acclimating to the unfamiliar gear and hanging around on almost dead bands because no access to 80 or 40, doesn't seem too bad.

Looking forward to getting everything functioning properly again and finding out what I can really do before we start heading for the solar flux doldrums again.

~ 73, Jim VE7FO

BARTG RTTY Contest

The BARTG RTTY contest on the weekend of March 16/17 represented the latest effort by a few of the operator training group to hone their skills. Results were somewhat successful on Saturday, although propagation was poor and contacts into Europe were conspicuous by their absence.

Kapila VE7KPK and Jinty VA7JMR, mentored by Brett VE7GM, were able to make a reasonable number of contacts, most of which were within North America. DX contacts were few but the response especially from the JA's later in the day was sufficient to demonstrate the trainees' ability to manage pileups when in Run mode and achieve excellent contact rates. The next day however, conditions changed for the worse. Sean VA7CHX and Anton VE7SSD did succeed in making their presence known while running, but contacts were few and far-between. We now know the reason to be a solar eruption on March 15 which caused a CME (Coronal Mass Ejection) striking earth on March 17, causing the planetary A index to jump to 46. Conditions deteriorated to the extent that the afternoon session which would have had Keenan VE7XEN mentored by Jim VE7FO was cancelled.

ARRL reports that the day after the big blast, the New York Times ran an interesting article on solar flares and possible effects on the power grid, satellites and communications. Check it out at http://www.nytimes.com/interactive/2013/03/19/science/space/0319-solar.html and a related article at http://www.nytimes.com/2013/03/19/science/space/on-the-watch-for-a-solar-storm.html.

This event provided a graphic example of the vulnerability of radio propagation to solar activity, and the above articles suggest that a larger CME could have been even more far-reaching in its effects. *~John Brodie VA7XB*

SEPAR Report

Kelvin Hall VA7KPH

SEPAR - PREPARING FOR EMERGENCIES

Emergency radio communications for the City of Surrey, Surrey Fire Services is the basic mandate of SEPAR. We need to be well trained and capable of responding to any emergency in an effective and efficient manner. We are the communication professionals. However, before we can concentrate on the task of providing emergency radio communications for the City of Surrey we need to know that our family is safe. How do we do this?

Preparing your family for an emergency:
Grab and Go Kits

Disasters take many forms: floods, winter storms, chemical spills, forest fires, earthquakes, major power outages, etc For more information on the fifty-seven hazards in British Columbia go to -
http://embc.gov.bc.ca/em/training/reference_manual.pdf

When disaster strikes, the best protection is knowing what to do. Be prepared to be on your own without help for **72 hours or more**, at home, in your car or at work.

Securing your home and putting together an emergency kit is vital - it will give you peace of mind to know that your family is prepared.

Step 1 Know the Risks -
http://www.getprepared.gc.ca/cnt/hzd/index-eng.aspx

Step 2 Make a Plan -
http://www.getprepared.gc.ca/cnt/plns/index-eng.aspx

Step 3 Get a Kit -
http://www.getprepared.gc.ca/cnt/kts/index-eng.aspx

Step 4 Visit the Get Prepared website -
http://www.getprepared.gc.ca/index-eng.aspx

A great resource is also the All-Hazards Emergency Preparedness Workbook
http://embc.gov.bc.ca/em/hazard_preparedness/AllHazards_WEB.pdf

After completing these steps, follow other emergency preparedness advice offered by the Province or the City of Surrey Emergency Program.

The following web site has some suggestions for your own Emergency Disaster Homepack
http://www.surrey.ca/city-services/709.aspx

Once you are comfortable that your family is safe then you can concentrate on the task of delivering emergency radio communications.

SEPAR is recruiting volunteers for this essential community service and if you are interested I would be pleased to meet with you to provide more information. You may contact me at VA7KPH@separs.net

We need to remember that we do this training because there is always the real possibility that a major event will occur. It is not a matter of IF a major disaster will occur but WHEN.

SEPAR Meetings

Third Thursday of each month starting at 1900 hrs

Fourth Saturday of each month starting at 0900 hrs

Location and event schedule can be found at separ.shutterfly.com – click on the calendar tab

Kelvin was a founding Member of the Aboriginal Affairs and Northern Development Canada's BC Emergency Management Team and led that team for 9 years. He is also Coordinator of the Surrey Emergency Program - Amateur Radio (SEPAR)

World Amateur Radio Day 2013

This year's theme for World Amateur Radio Day, April 18, is 'Amateur Radio: Entering Its Second Century of Disaster Communications' The International Amateur Radio Union (IARU) E-letter reports:

Each year the IARU Administrative Council selects a theme for World Amateur Radio Day (WARD) for the following year. WARD takes place each year on April 18. At the November, 2012 Administrative Council meeting the AC adopted the following proposal: "The theme 'Amateur Radio: Entering Its Second Century of Disaster Communications' was adopted for the next World Amateur Radio Day, April 18, 2013."

The selected theme for 2013 is a excellent opportunity for amateur radio emergency communications or disaster communications groups to take advantage of the WARD to highlight the role amateur radio plays in disaster communications and disaster response. IARU member-societies could arrange amateur radio demonstrations in public places such as parks or shopping areas. Prepared handouts could explain the benefits of amateur radio in times of emergency or disaster. A ham radio demonstration in public areas usually generates inquiries and questions from the public about amateur radio and it also provides a great opportunity to attract new ham radio operators. If you plan on such a demonstration, don't forget to include some young people from your society so that young people who happen by the demonstration can see that amateur radio activity can be enjoyed by people of all ages.

In 2013, April 18 is a weekday. However, that doesn't prevent the public activity from taking place on the weekend before or after April 18. The idea is to gain as much exposure and publicity for amateur radio as possible. Emergency communications groups might also combine a public demonstration for WARD with a simulated emergency test (SET).

WARD also provides an opportunity for amateurs to give presentations about ham radio to such groups as civic organizations, charitable groups, etc. For example, Rotary Clubs and Lions Clubs are only two of many worldwide organizations who have weekly meetings and these organizations are always looking for interesting and informative programs to present to their membership. There are very few experienced hams who can't talk for 15 or 20 minutes about ham radio in a positive fashion. Don't make the talk too technical. Stress the fun aspects of ham radio and the opportunity to assist in times of disaster. Keep the presentation to about 20 minutes to allow time for questions.

The fact that World Amateur Radio Day only happens one day each year shouldn't prevent IARU member-societies from promoting ham radio all during the year of course. Some member-society officials have expressed concern about a decrease in the number of new amateurs entering ham radio in their country. Upon further examination and discussion, it turns out there are many activities that societies could be involved in to increase public exposure to amateur radio but many are not taking advantage of those opportunities. WARD provides an opportunity to get out and make the effort to show the public what ham radio is about IARU at URL http://www.iaru.org/

The 3rd annual **'Day of the YLs'**will be held on 18 and 19 May 2013. This weekend is intended to gather on the air all amateur radio women around the world and, of course, all OMs are invited to participate.

A world wide meeting that you can not miss. Perhaps we can encourage some of the SARC and SEPAR YLs to participate!

For more information, please see http://www.eurao.org/en/node/472

Tech Talk

John Brodie VA7XB

Another Look At Short Antennas

Here are a few of the things that came out of VA7JW's Powerpoint presentation on short antennas at SARC's March meeting.

Short antennas are what many of us are forced to consider if we want to operate HF in locations with limited space, or with strata regulations or other constraints that suggest concealment or minimum visibility. Compromises are necessary but in many cases good results can still be achieved with proper design. "Short" usually means short with respect to the resonant half wave dipole. In such cases the bandwidth is narrower, feedpoint impedance is reduced and gain is compromised by lower efficiency of the radiator. The resonant frequency of an antenna is not the frequency at which the SWR is minimum, but the frequency at which the inductive reactance (X_L) and capacitive reactance (X_C) cancel out, leaving the effective radiation resistance (R) the only remaining component of impedance (Z). If the antenna is short with respect to the half-wavelength it will be characterized by X_C, and if long X_L. The radiation resistance (R) is effectively what dissipates the RF energy by radiating it.

Ideally, for the coax that we commonly use, R of the antenna should be 50 ohms, X should be zero which means Z will also be 50 ohms. These are seldom achieved in practice and the departure from ideal is commonly measured as an SWR (standing wave ratio) greater than 1:1. To restore the feedpoint impedance of short and long antennas, coils or capacitors, respectively, can be provided to balance the excess X_C or X_L. Shortened antennas always need some type of matching device, often built into the commercial products. A greater likelihood of interference to neighbourhood electronic devices and personal exposure to RF may be expected with short antennas, so low power is the norm. If the antenna is located indoors, a large amount of the RF energy may be absorbed by building materials, especially wire in stucco and rebar in concrete, although wood itself is largely transparent to RF. Location of equipment on the top floor of tall buildings obviously provides better propagation especially if there is access to the roof top, and it also presents more isolation from the majority of other tenants; however long grounds are virtually useless. Lower floors provide better opportunity for grounding and good possibilities for ground-based antennas. Many shortened antennas are non-resonant and may need an external tuner for a match to allow the maximum transfer of power from the transmitter to the antenna. A current balun is often beneficial to prevent RF from flowing on the outside of the coax and can be provided in many forms, such as snap-on ferrites, ferrite beads, and loops of coax. One way to facilitate multi-band antenna operation is to use traps tuned for different frequencies. John then described many types of short antennas including dipoles, "long" wires, verticals, ground planes, loops, compact Yagis, the purpose of counterpoise and artificial grounds, and capacity hats. He then finished off with a discussion of RF safety and sources of information on short antennas. Here is John's summary of the important points:

- Visit eHam for product reviews http://www.eham.net/
- Get the antenna outside
- Consider balanced (dipoles, yagi's loops) antenna systems first as "grounding" systems not required
- Verticals and long wires require radials or a counterpoise
- Long wires require a counterpoise and tuner
- Keep the antenna away from metallic objects
- If moving to a new location, choose an antenna-friendly site

You can get John's full presentation, including much more detail, by visiting this site:
http://www.nsarc.ca/hf/small_antennas_r1.pdf

Sea-Pac Hamvention

May 31—June 2nd at the Seaside Convention Center in Seaside, OR.

The 2013 Sea-Pac convention includes numerous exhibitors of new equipment as well as flea market tables where you can find lots of bargains on parts and vintage gear or perhaps sell some of your old equipment. If you don't want to set up a table, you can also sell equipment on consignment through the RAGS Country Store.

As usual, there will be a full slate of Seminars on Saturday and Sunday, as well as a Workshop on Friday. If you're looking to upgrade your license, VE testing will be available on Saturday morning, but you need to pre-register.

Dust Off Your Gear in Readiness for SARC's Annual RDF Foxhunt

SARC's annual foxhunt will be held on Saturday morning May 18th at Crescent Park in South Surrey.

The hunt will be followed by a barbeque for participants and their families. Bring the spouse, kids, grandkids, and dog and enjoy strolling in the forested trails while you hunt for the elusive quarry using your 2m handheld radio and beam or other directional antenna.

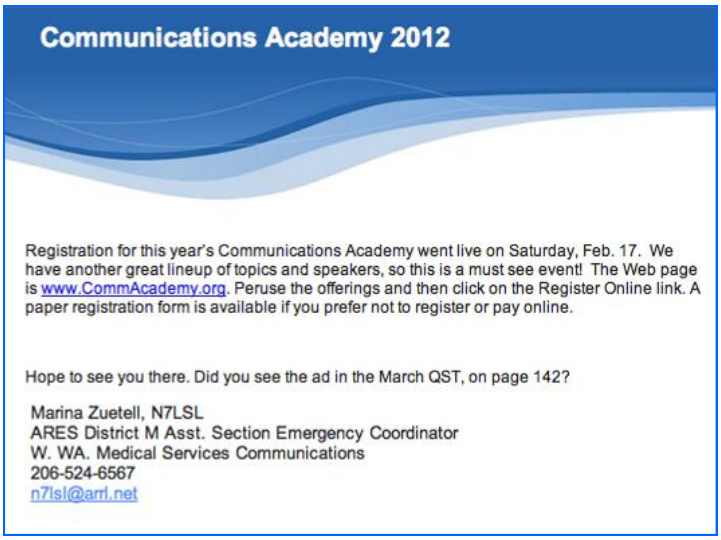
Club assistance is offered to construct a suitable antenna (see the March 2013 Communicator for details). The foxhunt is free, the BBQ is $10 per adult and $5 per child under 10 years.

More on the Foxhunt in the May Communicator so stay tuned for further details however, if you plant to attend you must advise Anton James VE7SSD at jamesadf@shaw.ca

What's Coming Later in 2013

- May – our annual Foxhunt plus (at the general meeting) preparations for Field Day and how you can do your part to increase our 2013 FD score by another 50%
- June – our AGM and final countdown to Field Day, which is on the weekend of June 22/23

Also planned is a guided tour of SARC's new repeater installation located on the roof of a 36-story hi-rise –the view is great!.



Vancouver Sun Run April 21, 2013 – Request for Amateur Radio Volunteers

Once again we are seeking volunteers from the Amateur Radio community to provide communications for the Vancouver Sun Run which takes place on Sunday, April 21, 2013. This email is being sent to those who have supported the event in previous years and to designated contact people for Amateur Radio clubs in the Lower Mainland. Please pass this information to others who may be interested in volunteering.

This is a tremendous opportunity to showcase the capabilities of Amateur Radio to the community, support an outstanding event, provide a valued community service and as a bonus you receive a very cool Sun Run 2013 T-shirt!

As in prior years, an on-line registration website is available for registration of volunteers. The website is now available for registration at URL:

http://sunrun.bcwarn.net

Social Time

At the March SARC meeting we discussed the merits of having a strictly social night distinct from club meetings (which are usually technical) and there was positive support for the idea. Having discussed it again at the Executive meeting on March 25th, an alternative suggestion was made, i.e. that instead of a dedicated social evening we get together at a local MacDonald's or Tim Horton's after our scheduled club meeting on the second Wednesday of each month. Since our meetings normally conclude at 9 pm, the hour or so afterwards is not too late for most of us.

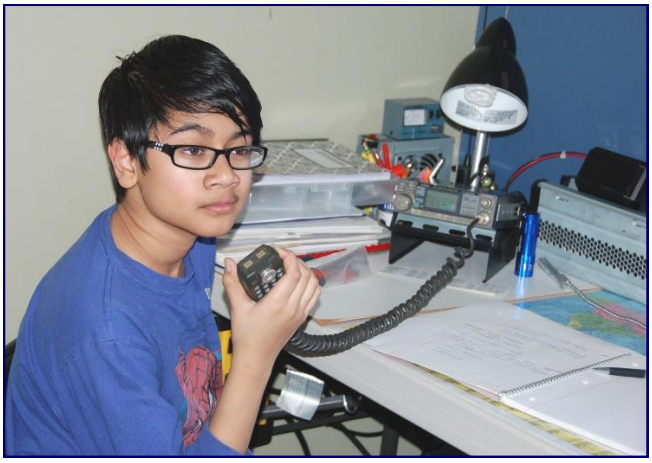
We will give it a try at our next meeting on April 10th and see if there is general support for this option.

QRM ...from the Editor's shack

Do you have a photo or bit of club news to share?
Something to sell or something you are looking for?
Email it to SARCcommunicator@outlook.com for inclusion in this column.

Recent Graduates

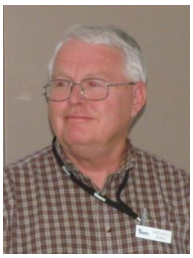
Two of our SARC members had their sons enrolled in the recently completed Basic Amateur Radio licensing class. Both Lahiru Jayaweera, son of Kapila VE7KGK and Greg Kirk, son of Gord VE7GRK, achieved the Basic with Honours license class. Greg (right) is 10 years old.



Lahiru (above) is age 12 in grade 6 and he is also an accomplished chess player. He loves hockey and his chosen callsign, VA7KSC reflects that. He refers to KSC as Kings Stanley Cup. You can surmise that he is a Kings fan.

Kapila will introduce him to the use of his transceivers and hopefully we will see both Lahiru and Greg at forthcoming SARC events and activities. SARC congratulates both of you on a fine effort and welcomes you to our hobby.

Congratulations to John MacFarlane



John VE7AXU/VA7PX has been qualified by Industry Canada as an accredited examiner for SARC. John joins our other two accredited examiners John Brodie VA7XB and John Schouten VE7TI.

Wanted

Rob VE7CZV still needs an auto-tuner for his HF rig, specifically for 80m.

If you have or know of one that is available at a good price, please contact Rob via robgil@telus.net

CQ... CQ... CQ For Sale

$350.00

Almost brand new... Comet CAA-500 SWR antenna analyzer, shown on the right. Costs $450 at RadioWorld.

This is a great portable instrument, for HF, VHF (including 220 MHz) and UHF.

Why am I selling it? Because I want to purchase an instrument that can plot graphs.

John VA7XB va7xb@rac.ca
or 604-591-1825

Free Magazines

VE7MDL has a whole lot of Ham Radio Magazines - QST, QEX, Radcom and The Canadian Amateur from current to 3 years old all In excellent condition.

Please get in touch with Leona Skovgaard bcgirl@rogers.com and make arrangements to pick up in East Richmond.

Page 13—News You Can Lose

The Lighter Side of Amateur Radio

You Might be Addicted to Ham Radio if:

1. When you look at a full moon and wonder how much antenna gain you would need.
2. When a friend gets a ride from you and remarks that you have a lot of CBs in your vehicle, it turns in to an hour long rant on how ham radio is not CB radio.
3. When someone asks for directions, you pause; wondering if long or short path would be best.
4. When you can look at a globe and be able to point to your antipode (and you know what an antipode is). Cool antipode map at http://www.antipodemap.com/
5. Your cell phone ring tone is a Morse code message of some kind
6. You have accidentally said your Amateur Radio call sign at the end of a telephone conversation.
7. Your favorite vacation spots are always on mountain tops.
8. You notice more antennas than road signs while driving your car.
9. You have driven onto the shoulder of the road while looking at an antenna.
10. Porcupines appear to be fascinated with your car.
11. If you ever tried to figure out the operating frequency of your microwave oven.
12. When you look around your bedroom of wall to wall ham gear and ask: Why am I still single?
13. The local city council doesn't like you.
14. You think towers look pretty.
15. Your family doesn't have a clue what to get you for Christmas, even after you tell them.
16. Your HF amplifier puts out more power than the local AM radio station.
17. The wife and kids are away and the first thing that goes through your head is that no one will bother you while you call "CQ DX" a few hundred times.
18. When you pull into a donut shop and the cops there on their coffee break ask if they can see your radio setup.
19. You refer to your children as your "Harmonics".
20. Your girlfriend or wife asks: "You're going to spend $XXXX on what???
21. You actually believe you got a good deal on eBay.
22. When you see a house with a metal roof and your only thought is what a great ground plane that would be.
23. You have pictures of your radio equipment as wallpaper on your computer's desktop.
24. Every family vacation includes a stop at a Ham radio store.
25. The first question you ask the new car dealer is: "What is the alternator's current output"?
26. You buy a brand new car based on the radio mounting locations and antenna mounting possibilities.
27. You have tapped out Morse code on your car's horn.
28. A lightning storm takes out a new Laptop, Plasma TV, and DVD Recorder, but all you care about is if your radios are okay.
29. Your wife has had to ride in the back seat because you had radio equipment in the front seat.
30. Your wife was excited when you were talking about achieving that critical angle, but very disappointed when you finally did.
31. During a love making session with your wife, you stop to answer a call on the radio.
32. Your wife threatens you with divorce when you tell her that you are going on a "fox" hunt.
33. Talking about male and female connectors makes you feel excited.
34. You dream of big, comfortable knobs, but not on women.
35. You always park on the top floor of the deck, just in case you might have to wait in the car later.
36. When house hunting, you look for the best room for a radio shack and scan the property for possible tower placement.
37. When house hunting, you give your realtor topographical maps showing local elevations.
38. The real estate agent scratches his head when you ask if the soil conductivity is high, medium, or low.
39. You have Ham radio magazines in the bathroom.
40. When your doorbell rings, you immediately shut down the amplifier.
41. Fermentation never enters your mind when "homebrew" is mentioned.
42. Instead of just saying no, you have said "negative".
43. You have used a person's name to indicate acknowledgement.
44. You become impatient waiting for the latest Ham Radio Outlet catalog to arrive.
45. You have found yourself whistling "CQ" using Morse code.
46. You always schedule the third weekend in June for vacation.
47. You walk carefully in your back yard to avoid being close-lined.
48. You have deep anxiety or panic attacks during high winds or heavy ice.
49. You and the FedEx/UPS men are on a first name basis.
50. You really start to miss people that you've never seen.
51. Your exercise machine is a Morse code keyer.
52. You walk through the plumbing section at the hardware store and see antenna parts.
53. Your neighbors thought you were nuts when you ripped up your lawn to bury chicken wire.
54. Your next door neighbor thinks that your wife is a widow.
55. Your wife has delivered meals to your Ham shack.
56. If you sold all your Ham radio equipment, you could pay off your mortgage.

RAC News Radio Amateurs of Canada

RAC Section Managers reaffirm support of NTS

Section Managers representing all RAC Sections coast to coast concluded discussions recently regarding NTS (National Traffic System), and they confirmed ongoing support of NTS encouraging operators to continue to support NTS by passing traffic on a regular basis. NTS digital and Win link 2000 is the preferred system for ARES Units to remain interoperable and functional in a digital world and operators who have digital capability are encouraged to keep the system busy.

Two Oscar One Two London DVD

The organizers of 2O12L, the most successful special event station of all time and celebrating the London Olympic and Paralympic Games in the Summer of 2012 have now released a 45 minute DVD of the event. Produced by team member Fred Curtis/G3SVK, the DVD goes behind the scenes of the event, telling the story of how those 69,644 QSOs were made possible. Details can be found at their web-site http://www.2O12l.com under the "News" link.

RAC Field Organization Industry Canada meet in Ottawa

Recently, a meeting was held at Industry Canada's Ottawa headquarters, a follow up to last year's Canadian Amateur Radio Advisory Board (CARAB) where an offer to meet on operational issues was made.

During the meeting RAC shared documents relating to the Field Organization Review Project that explained the operational structure and purpose of the project and spoke about our Training working group's work. Industry Canada presented an outline of their District Emergency Telecommunications (DET) emergency telecom organization and their roles and responsibilities. They also explained their initiatives relating to use of their HF radio system, voice and digital for exercises, regular drills and emergencies, expressing an interest in building on their interactions in this area with RAC members.

Both parties agreed at the end of the meeting that regular informal exchanges could be of value.

RAC Planning Session – February 15-17, 2013

This February the Board and Executive of RAC met in Ottawa to develop the planning context for 2013 and 2014 and the vision for RAC over next five years. Our last face to face planning meeting was in October of 2012 and we have successfully completed the objectives set out in that meeting; RAC is now solvent and we have stopped the slide in membership numbers.

This February the following key objectives were set:

- Increase number of active amateurs in Canada
- Identify key demographics and increase RAC membership as a percentage of active amateurs across Canada's demographic mosaic.
- Enhance the relevance and respect for amateur radio in the eyes of the public and then leverage that respect with government. This will support spectrum protection, our influence on municipal issues and prevent new attacks on amateur radio privileges such as we saw (and are seeing) in distracted driving.

The foregoing requires that RAC move from a survival to growth mode and develop new resources to support achieving those goals. We agreed to continue to operate in the fiscally responsible fashion that we established in 2010 and noted the need to establish new budget lines to support key activities and eliminate the subsidies provided by our officers. We agreed to establish a resource to provide key information support (paper and electronics) for clubs, member and media to support us in achieving our objectives.

Webinars to discuss our plans in more detail

Over the course of the next few months we will be undertaking regional webinars with Club Presidents and Field Service members chaired by the President and the local Regional Director. These meetings will allow us to discuss our plans for 2012/2013 in more detail. We are looking forward to creating this opportunity for dialogue.

More information will come out in the TCA and RAC Report so stay tuned.

The SARC Calendar ...places to be in Surrey for Amateur Radio in the month ahead

April 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2	3	4	5 Weekly SARC Breakfast 8:00 ABC Restaurant 74th & King George Blvd.	6
7	8	9 SEPAR NET 7:30 SARC NET 8:00	10 SARC Monthly Meeting	11	12 Weekly SARC Breakfast 8:00	13
14	15	16 SEPAR NET 7:30 SARC NET 8:00	17	18	19 Weekly SARC Breakfast 8:00	20 CONTEST: Ontario QSO Party (CW/SSB) TARA Skirmish (Digi)
21 CONTEST: Ontario QSO Party (CW/SSB) ARRL Rookie Roundup (SSB)	22	23 SEPAR NET 7:30 SARC NET 8:00	24 SARC Exec Meeting	25	26 Weekly SARC Breakfast 8:00	27 CONTEST: Florida QSO Party (SSB)
28	29	30 SEPAR NET 7:30 SARC NET 8:00	31	1	2	3

For details on all SARC events, go to ve7sar.net

For details on all SEPARS events, go to separ.shutterfly.com/calendar

Contest Details: http://hornucopia.com/contestcal/contestcal.html

QRT John Brodie VA7XB

Damn the Torpedoes - Field Day is Coming!

Field Day is coming up fast, folks. Will we be ready to make the most of it? Well, I do know that the Field Day Planning Committee is working hard on all the myriad of details that must be thought out and resolved before Field Day which, this year will be held on the weekend of June 22nd and 23rd. Your planning committee is led by Brett Garrett VE7GM, assisted by Kelvin Hall VA7KPH, John Schouten VE7TI, Jim Smith VE7FO and John Brodie VA7XB.

Other members are stepping up and making themself available to handle specific duties. The organization and preparation of food will be the responsibility of Joyce Robertson VA7JCE, Duncan Robertson VA7DCN, Arthur Siemens VE7SIE, and Nicole Stopa VE7PET. Jinty Reid will be GOTA station manager, Peter Gauld VE7PGX is looking after messaging, Nell Wrotniak VA7NEW satellite contact, and Scott Hawrelak VE7HA finances. Fred VE7IO, Jim VE7FO, Peter VE7PGX and Kapila VE7KGK will between them attend to the computer/radio setup and networking. Kelvin VA7KPH has taken on the big job of publicity and public information and ensuring that the week of FD is proclaimed by Surrey Council as "Amateur Radio Week". John VA7XB and Kelvin VA7KPH have prepared a site layout including antenna placement. Jim VE7FO is our senior "consultant" on overall strategy, propagation and technical matters. We are still looking for a Site Safety Officer.

The site of Field Day is again Grandview Heights School grounds, located at 20th Ave and 176th Street (Pacific Highway). The merits of this location have been well proven, and include the high elevation (good for propagation), the presence of numerous tall trees (for wire antennas), the spacious grounds (for public parking, participants' trailers and mobile homes, and operating tents) and the quiet yet public location near a main thoroughfare.

What will be different this year?

For one thing it will be strictly a SARC-SEPAR show as LARA will not be joining the effort. (Still, we hope that some of the LARA crew will stop by for a visit and perhaps lend a hand).

Food planning this year is well in-hand. We have been promised the use of the Salvation Army mobile kitchen which will facilitate food preparation (provided it is not needed for an emergency – always a possibility). Last year food was a problem and very much a last-minute affair.

On the operating side, we're going to drop 2m and 160m from the game plan as the results simply did not justify the effort. The emphasis will be on CW and RTTY this time, as each of these modes earn double points compared with SSB. We will not be using SEPAR's Kenwood TS-480 radios (which are not entirely suitable for contesting) but, instead, have been offered the use of more sophisticated radios which will pay dividends in reducing adjacent strong signal overload and giving our ops the very best chances of making Q's. The antenna arrangement will be simpler – two tri-band beams for 10, 15 and 20 m, each on their own tower, a 6 m beam, a wire antenna for 40 m and another for 80 m. No antenna rotators will be used this year, reducing the complexity. Beam direction will be set manually using ropes, an arrangement that suits our primary directional focus (to the east, southeast and south). Station managers will be assigned to each shift to oversee the tactical approach and to remedy problems. Operating shifts will be 6 hours long which means that over 24 hours we will have 4 operators for each mode (12 in total) with standby operators assigned for backup.

Qualified operators are the key component of a successful FD, and this year we have again managed to recruit some top performers. The operating schedule is already filling out with priority naturally being given to those who are known active contesters, or who have been building their skills in the operator training program over the last year or so. Several of the operator trainees have made great progress in mastering the N1MM logging software and all its features, and handling the steady activity of the busy "runs" we will need to sustain to reach our potential.

The ability to "run" (i.e. hold the frequency, call CQ and get other stations to come to you is a skill that takes steady nerves, stamina, and the confidence to work through the pileups and sort out the stations in an efficient, methodical manner. All operators will do their own logging, which reduces errors, improves operating speed, and eliminates the need to double up on operators.

Bonus points, which are earned for activities other than HF radio contacts, are critical to earning a high score. We will endeavour to maximize the number of bonus points by taking advantage of all available opportunities including a GOTA station, message handling, public information tables, youth involvement, visits by public officials, educational sessions, etc.

If you are not already part of this year's SARC-SEPAR Field Day team, you still have time to join in. The planning committee will find you a job if you let it be known that you are willing to volunteer. Last year the SARC-SEPAR-LARA team achieved the No. 1 score in BC and No. 2 in Canada for stations operating as 3A (3 stations, portable power). This year our goal is to be No. 1 in Canada. Would you like to be part of this winning team? If your time does not permit early involvement, we hope you will come out to the site on Friday June 21st (starting 11 am) to help set up, then again on Sunday June 23rd to help take down. We'd all love to see you there!

~ John VA7XB and Brett VE7GM